<u>REMARKS</u>

Applicant respectfully requests reconsideration of the subject application. This Response is submitted in response to the Final Office Action mailed January 21, 2010. Claims 1-29, 31-41, 43-56 and 58-66 are pending. Claims 1-21 are withdrawn from consideration. Claims 22-29, 31-41, 43-56 and 58-66 are rejected. In this Amendment, claims 22, 34, 49 and 58 have been amended. No new matter has been added.

<u>35 U.S.C. § 112 Rejections</u>

The Examiner has rejected claim 22 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the Examiner states that claim 22 includes both data and software. Applicant has amended claim 22 so that only software is claimed. Applicant believes that the amendment overcomes the Examiner's rejection. Applicant, respectfully requests withdrawal of the rejections of claim 22 under 35 U.S.C. § 112, second paragraph.

The Examiner also made the suggestion that the data (such as the advertisement payment information) can be claimed separately from functions that are executed by the processor. Applicant understands that such a modification to the claim will allow for separation of executable and non-executable pieces of the technology. However, Applicant is concerned that such a modification could make the claim difficult to comprehend under this section because of separation of the computer-readable

instructions. Applicant submits that the invention as claimed would be relatively easily ascertainable by one of ordinary skill in the art.

35 U.S.C. § 101 Rejections

The Examiner has rejected claim 34 under 35 U.S.C. § 101 because the invention is directed to non-statutory subject matter. On page 3, lines 9-11, the Examiner states that the limitation "operating a search engine" does not satisfy the requirement under 35 U.S.C. § 101 because a human operator may complete this step and satisfy this claim, and human operators are not statutory classes of invention. Claim 34 has been amended by reciting "utilizing the processor to operate the search engine." Claim 34 has also been amended to recited that a search engine in stored on the medium. Furthermore, the processor forms part of a server computer system. The processor, search engine, server computer system and medium are all non-human. As such, Applicant respectfully submits that claim 34 now satisfies the requirement under 35 U.S.C. § 101, and Applicant respectfully requests withdrawal of the rejections thereof.

In paragraph 9, pages 3-4 of the Office Action, the Examiner has discussed the non-patentability of extra-solution activity. This discussion relates to the same limitation referred to by the Examiner on page 3, lines 9-11. By amending the claim as indicated, human operators are eliminated from the claim and hence there can be no extra-solution activity not carried out by a particular machine.

<u>35 U.S.C. §103 Rejections</u>

The Examiner has rejected claims 22-29, 31-41, 43-56 and 58-66 under 35 U.S.C. § 103(a) as being unpatentable over Cheung, et al., (U.S Patent Publication No.: 2003/0028529, hereinafter "Cheung") in view of Leishman, et al., (U.S Patent Publication No.: 2004/0073538, hereinafter "Leishman"). Applicant submits that the claims, as amended, are patentable over the combination of references.

On pages 5 and 6 the Examiner states that Cheung discloses all the elements of the claim except for geographic data of a location, and on page 6 the Examiner states that Leishman discloses geographic data of a location. At the bottom of page 5 and the top of page 6 the Examiner states that databases inherently include the functionality of ranking and categorizing/"mapping to a category". However, according to the present invention, there not only exists a plurality of data store sales categories, but there is also a mapping function that maps the query to a mapped query sales category. The mapped query sales category can then be associated with one of the data store sales categories. The associated data sales category and the geographic location data are then used to extract search results.

Claim 22 now specifically includes the limitations of:

'…a query receiving function executable by the processor to receive a search query over a network from a user computer system, <u>the query having an associated sales category among a plurality of query sales categories</u>…;

an advertiser data store including a plurality of advertiser entries <u>each being associated with a respective data store sales category;</u>

a search engine executable by the processor to extract a plurality of search results from the advertiser entries based on the geographic location data <u>and by associating the query sales category with one of the data store sales categories;…</u>"

Applicant submits that Cheung does not disclose the invention as claimed. Cheung only discloses a structured data base. Furthermore, Cheung does not disclose the limitation of utilizing the query sales category to associate a data store sales category from the data store. What Cheung discloses is a database that is structured. A search in the database can be conducted by examining the actual data of the database, not by examining the structure of the database. In the present invention, by contrast, entries are extracted based on data store sales categories.

Leishman adds nothing to Cheung in this regard and has been relied on by the Examiner for disclosing geographic data of a location.

The combination of references fails to teach or suggest a number of limitations of claim 22. As such, Applicant submits that claim 22 is patentable over the combination of references. Claims 23-29 and 31-33 depend from claim 22 and should be allowable for at least the same reasons as claim 22. Clam 34 has been amended with limitations similar to the limitations that have been added to claim 22 and should thus be allowable for at least the same reasons as claim 22. Claims 35-48 depend from claim 34 and should be allowable for at least same reasons as claim 34. Claim 49 is similar to claim 34 and claims 50-56 and 58-66 depend from claim 49.

Support for the amendments can be found in the following sections:

The query sales categories are described in paragraph [0034]:

"The first region 26 of the search provider's web page 24 includes a search field 38, within which the user can type a category 40, e.g., Italian restaurant, that is to be searched by the search engine server 16. After typing the category into the search field, the user clicks on the search button 40, which is located in the upper-right corner 42 of the web page, using the mouse (not shown), or by pressing the enter key (not shown) on the user's computer keyboard (not shown), to transmit the search request from the browser on the user's computer 12 to the search engine server. Next, as discussed below, the search engine server collects the search results, prioritizes the results, and sends the prioritized results back to the user's computer for display on the monitor (not shown). The category search can be limited to apply only to restaurants if a checkbox 44, located below the category field, is selected."

The following code from the specification describes where site "targets" are put together with sales categories. Site targets are a combination of some of the editorial categories/tagging and sales categories are mapped against that.

```
## let's go get some data about what I'm looking at
## Site target ids
my $page_type_id = &Guide::Model::PageTypes::name_to_id(Sparams-
>{page_type});
my ($site_target_id, $min_dist, $max_dist, $sales_cats) =
&Guide::Model::SiteTargets::name_to_id({
              page_type_id => $page_type_id,
              page_type_data => $params->{page_type_data},
              });
```

The retrieved sales categories are stored for later use when putting together the final ad display.

```
$rkw->Cstid_' . $site_target_id) = 1;
$ad_data->fsite_target_id1 =
$site_target_id; $ ad_data-> {s
ales_cats 1 = $sales_cats;
my $multiplier = $params->{market_multiplier} || 1;
```

A search pulls in the relevant sales categories that have been mapped to that metro/coverage area. This is simply another step in "mapping".   The following code describes the process of "logging" what actually was retrieved:

```
$self->log(`Mode: ' );
if ($ad_data->{metro_mode} = 1) {
  $self->log('Metro');
} else { $self->log('Coverage Area'); }
unless ($ad_data->fmetro_mode)) {
  $self->log('Sales Categories: ' . $sales_cats);
  $self->log('Center point lat: ' . $search_params->{lat} . ' Long: ' .
  $search_params->{long)); $self->log('Market Multipler: ' . $multiplier );
  $self->log('Sales Category max dist: ' . $max_dist );
```

Finally, the search is actually executed. The code does not actually include the term "sales_cats" because it is already part of "ad_data".

```
## Push RKW's into a string
$1search_params->{rkw} = join ('+', keys %{$lrkw});
my $results = $search->search($lsearch_params);
foreach my $data_hash (@($results->{list}->[0]->{item}}) {
  my $featured_ad = new Guide::Model::FeaturedAd ( $data_hash );
  $featured ad->metromode($ad_data->{metro_mode});

  $self->log("Found tier 1 ad id:" . $featured_ad->ad_id);
  ## Note, we're not checking the limits here because we've limited the result set to
4 items above
    push @{$ad_data->{1} }, $featured_ad;
  }
  unless (scalar @{$results->{list}->[0]-> {item} }) { $self->log("No tier 1 ads
found"); } Sad_data->{limits}->{1} = scalar @{$ad_data->{1}} if (scalar
@{$results->{list}->[0]- >{item}}
                         and scalar @ {Sad_data-> {1 } } > Sad_data-
  > {limits} -> {1 }); $self->log("End search for tier 1 ads");
  }
```

Although previously presented in a declaration, Applicant believes it necessary to reiterate that Applicant also believes the invention to be non-obvious of certain secondary reasons:

The independent claims recite an integrated billing system, category-based and geo-location-based searching system. Some of the code for integrating a billing system, category-based and geo-location-based searching system is included as Appendix A to the present patent application. As can be seen, especially on pages 25 and 26 of the present patent application, such an integration process is not a trivial matter. The development of such an integrated system was undertaken by a team of six software engineers over a period of six months. The invention and development have thus required a considerable investment in time, money and effort by myself and many other highly skilled engineers and the Assignee company for the present patent application.

As further evidence of the non-trivial nature of the present invention, the Examiner is requested to take note of the fact that it has taken other companies much longer to develop such a system. No company was able to develop a local targeted pay per click advertisement system at least through the end of 2004. For the examiner's benefit, developments in this area though 2004 by major search engine companies Google and Yahoo are documented in Appendices A, B, C and D to the affidavit on record by the inventor Russell Alan Foltz-Smith.

Dependent claims 64 to 66 relate in essence to a pacing function that calculates a billing frequency based on the cap amount and a future date or time. A pacing factor is still not broadly used within the industry. A search engine will typically run an account

out as fast as possible because a) the math for pacing is not trivial, b) they may not have insight into pacing algorithms for local business, and c) there may not be any desire to pace. For these additional reasons, Applicant also believes that these claims are not obvious over the combination of references.

For all the reasons above and given the relative large period of time that has passed since the invention was made, Applicant believes that the Examiner is relying on impermissible hindsight by saying that one of ordinary skill in the art would consider the invention obvious at the time that the invention was made.

It was held in *KSR Int'l Co. v. Teleflex, Inc.* No. 04-1350, 550 U.S. 398 (Supreme Court 2007) that there is a "common sense" standard for determining obviousness or non-obviousness. The reasons given above address why Applicant believes the invention is not obvious because it was not common sense for one of ordinary skill in the art to come up with the invention at the time that the invention was made.

Applicant requests withdrawal of the rejections and respectfully submits that the present application is in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call Stephen M. De Klerk at (650) 798-0342.

Please charge any shortages and credit any overages to Deposit Account No. 19-3140. Any necessary extension of time for response not already requested is hereby requested. Please charge any corresponding fee to Deposit Account No. 19-3140.

Respectfully submitted,
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Date: April 23, 2010   /Stephen M. De Klerk/
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